

SECTION C – DESCRIPTIONS AND SPECIFICATIONS

STATEMENT OF WORK

The contractor shall furnish services to the Naval Surface Warfare Center, Carderock Division (NSWCCD-SSES) in support of ship alteration (SHIPALT) and machinery alteration (MACHALT) programs for hull, mechanical, electrical and electronic ship systems of the Atlantic and Pacific fleets.

I. BACKGROUND AND GENERAL SCOPE

NSWCCD-SSES participates in the development and execution of various tasks related to modifications of and alterations to ship systems. These tasks encompass all phases of the alteration process, from conceptual design, through prototype and proof-in installations to the production phase. The prototype is the full-scale, functional model of a new design, type or application. The goal of the prototype phase is to prove the functionality of the initial conceptual design and to assess configuration, producibility and performance. Prototypes are “one of a kind” installed on one ship or test facility. Proof-in installations tailor the general parameters of a successful prototype into ship class specific applications. This may necessitate significant changes in installation methods and requires development of ship class specific support documentation. Production installations are the final phase of the alteration process and should integrate all lessons learned from prior steps into a working installation package integrated into the applicable ships.

The contractor will be required to provide a full spectrum of engineering, technical and logistics support services for development and implementation of SHIPALTS and MACHALTS to vessels of the U.S. Navy and other Federal agencies. The type and level of detail of support will vary depending upon particular program requirements.

Under Contract Item 0001, the contractor shall provide engineering, technical and logistics support services in accordance with delivery/task orders placed under this line item. Under Contract Item 0002, the contractor shall provide other direct cost items as required to successfully perform contract objectives. These cost items shall include, but are not limited to, travel, incidental supplies, miscellaneous subcontracting and computer support. All items to be reimbursed under Item 0002 must be properly incurred direct charges to an order under the contract. Only those costs considered allowable, allocable and reasonable as “other direct costs” by the cognizant Defense Contract Audit Agency auditor will be paid by the Government.

II. FUNCTIONAL AREAS

The contractor will be required to accomplish specific objectives set forth in the orders issued under the contract. The tasks specified in the delivery/task orders will consist of performing or supporting the following functions:

A. ENGINEERING/TECHNICAL SUPPORT

1. Development of alterations:

- (a) Identify and resolve compatibility issues with other ships systems or subsystems raised by proposed alterations
- (b) Prepare procedures for the integration of alteration programs, including identifying and defining interfaces and relationships between the alteration programs and other DOD systems and subsystems.
- (c) Conduct technical research pertinent to the development and installation of alterations.
- (d) Propose design alterations based on research and test results.

- (e) Develop testing methods for alterations.
- (f) Design prototype, proof-in and production installations and revise designs to implement improvements and technical changes.
- (g) Develop and implement a NSWCCD-SSES approved Quality Assurance Program for alterations.

2. Fabrication, Installation and Testing of Alterations:

- (a) Fabricate and/or kit procurement of prototype, proof-in and production alterations.
- (b) Install prototype, proof-in and production alterations using skilled labor.
- (c) Evaluate performance, conduct operational tests of alterations and review test data.
- (d) Conduct studies to procure data necessary to assemble QA manuals for alterations.
- (e) Perform on-site surveys, assessments, validations and verifications to develop recommendations for improvements or technical changes.
- (f) Test, analyze and make recommendations for changes to prototypes of each applicable ship class; reconfigure, reinstall and retest prototypes.

3. Configuration Documentation and Software Systems Support:

- (a) Produce Engineering Change Proposals (ECP) and Ship Alteration Records (SARs).
- (b) Generate Machinery Alteration (MACHALT) Program documentation including ECPs (including preliminary engineering change proposals (PECPs) and formal engineering change proposals (FECPs)) and distribute such documentation to all activities concerned in acceptable format.
- (c) Generate and maintain documentation required in the course of the configuration control board approval process of MACHALTs, including maintenance of a MACHALT documentation retrieval system.
- (d) Conduct research to support development of ECPs (including PECs and FECs) in acceptable format.
- (e) Develop installation instructions and installation drawings.
- (f) Develop approved ILS packages for alterations.
- (g) Document technical reports and studies, including both text and graphic material, to support change proposals.
- (h) Maintain the Machinery Alteration Tracking System and the Machinery Alteration Archive Program.
- (i) Establish and maintain documentation storage and retrieval systems for historical alteration projects.

4. Configuration Management Support:

- (a) Assist in the implementation of Alteration Quality Assurance Projects, tasks to include (but not be limited to) developing Quality Assurance (QA) packages for various alterations.
- (b) Assist in formulating overall quality assurance policies.

(c) Conduct quality studies of design, manufacturing, production control, inspection, assembly, test, installation, packaging and shipping for the purpose of assembling data into a QA manual, which meets the NSWCCD-SSES Criteria for quality assurance.

(d) Provide services to support SUBSAFE Installation. (Certified facilities and processes are not required.)

B. LOGISTICS SUPPORT

1. Collect alteration data as necessary to determine technical and schedule impact.
2. Conduct a quality review of the original technical data package for conformance with delivery order specifications.
3. Prepare or revise technical documentation in accordance with task directives and applicable government specifications and standards, to include, but not limited to, Technical Manuals (TM), Interactive Electronic Technical Manuals (IETM), Test Procedures, Allowance Parts List (APL), Planned Maintenance System (PMS), Engineering Operational Sequence System (EOSS) and other OSS including AFOSS, SDOSS, and CATOSS, Technical Repair Standard (TRS), Intermediate Maintenance Standard (IMS), Class Maintenance Plan (CMP), Allowance Equipage List (AEL), Provisioning, Technical Documentation (PTD), and Logistic Support Analyses (LSA).
4. Develop technical data in various formats, including digital format conforming to the Department of Defense Computer-Aided Acquisition and Logistics Support (DOD CALS) Directive. Mark-up digital material in accordance with the Standard Generalized Markup Language (SGML) or Advanced Integrated Maintenance Support System (AMISS).
5. Provide designs detailed to government drawing levels as specified.
6. Support use of the Configuration Data Manager's Database-Open Architecture (CDMD-OA) at the role level of In Service Engineering Agent (ISEA).
7. Develop alteration installation plans and schedules based on NSWCCD-SSES identified criteria.
8. Develop, assemble, stage, distribute, install and maintain alteration documentation and equipment.
9. Develop planning and procedures for alteration of software and hardware elements including kit development, procurement, assembly, staging, distribution and scheduling and participate in the execution of these logistic elements to ensure that the objectives of the established schedule are met.
10. Review for accuracy and develop improvements to Alteration Program installation plans, standards, and specifications.
11. Perform a review of ECPs and installation instructions to ensure that all logistic support requirements that might be impacted by the proposed change have been adequately considered, e.g. spares, tools, test equipment, training, and TM and other documentation changes.
12. Perform a review of alteration kits to ensure that all logistic support requirements that might be impacted by the proposed changes have been adequately considered. Make information obtained available to support recommended corrective action. Review initial proof-in installation kits to ensure the alteration configuration and installation standards are accurate prior to full class installation.
13. Acquire the required material and fabricate, assemble and install the alteration equipment for the prototype, proof-in and production installations.
14. Provide logistic services to assist in the identification and sourcing of material including:

- (a) Screen material requirements to ascertain availability in the Navy Supply System: validate Manufacturer's Part Number and National Stock Number (NSN), and related data; screen Federal Supply Schedules and other Federal sources; and identify those requirements not in the Navy Supply System.
- (b) For material requirements not available in the Navy Supply System: identify commercial sources of supply that meet technical data requirements; provide technical requirements in preparation of Open Purchase documentation; and identify proprietary restrictions appearing on drawings.
- (c) Proof and codify Navy-owned drawings.

15. Provide other logistic support services including participating in meetings, visiting Government field and industry sites, recommending replies to logistic correspondence and participate in inventory reviews of both hardware and software.

C. MATERIAL SUPPORT

1. Contractor will be required to procure, store and stage incidental material identified as IAF in alteration drawings or other documentation (as specified in individual task/delivery orders), as well as other material not specifically called out but inherently necessary to alterations.

- (a) The term "material" includes supplies, material, equipment and hardware. Material shall also include automatic data processing equipment (ADPE) and ADPE services and software, but only to the extent specifically identified individual delivery orders.
- (b) The cost of general business items/expenses required for the conduct of the contractor's normal business operations will not be considered an allowable direct cost in the performance of this contract. General business items include, but are not limited to, charges for telephone, cellular telephones, pagers and utilities, purchase or maintenance of typewriters, reproduction machines, word processing equipment, personal computers, cellular telephones, pagers, fax machines and other office equipment and office supplies and services.

2. Developing and installing ship alterations often requires use of final material products and components that are not available commercially or through the Navy Supply System, or are only available in limited quantities. Therefore, the contractor will be required to fabricate items and/or make alterations to certain acquired items, including:

- (a) procure and fabricate general structural components, hardware and special tools;
- (b) procure and fabricate specific ship system components related to current and new configurations;
- (c) procure and fabricate control, monitoring and display components with interconnecting electro-optical, electrical and electronic interconnections and interfaces; and
- (d) provide services common to marine and ship repair facilities (such as gas free engineering, machining, lagging and tooling).

3. The contractor will be required to provide for the transportation of material between the contractor's storage facility and government storage facilities.

III. FACILITIES/CAPABILITIES

Facilities:

1. Facilities are required to have CONFIDENTIAL security clearance and controlled access work areas as specified in the DD254 form attached hereto.

2. The requirement for maintaining the following facilities shall not be construed to mean that the Government will be obliged to pay any direct costs in connection therewith. Further, the Contractor shall not be entitled to any direct payment in conjunction with any personnel set in readiness at or brought to such facility in preparation or in expectation of work to be performed under the Contract. Payment for labor hours and materials will be made only for such hours and materials actually expended in performance under the contract.

3. The contractor must maintain the following facilities at the following locations:

(a) Philadelphia – Liaison office within 5 miles of Naval Business Center, Philadelphia (Pennsylvania). Personnel in the local liaison office will resolve technical problems associated with the delivered data, (b) coordinate the delivery/receipt of technical data with NSWCCD-SSES (c) react to urgent requests assigned by NSWCCD-SSES and (d) correct/prepare data and plans. The number of personnel in the local liaison office may vary according to workload but it must be staffed to accommodate contract workload requirements.

(b) San Diego, CA; Norfolk, VA; and Mayport, FL: An office and industrial center within 25 miles of Naval Station San Diego (California); an office and industrial center within 25 miles of Naval Station Norfolk (Virginia); and an office and industrial center within 25 miles of Naval Station Mayport (Florida). Each office and industrial center must have the following capabilities:

(i) Machine shop (shop and down river) - capable of removing, repairing, machining, testing, cleaning, hydraulic flushing and reinstalling various HM&E components.

(ii) Sheet metal/structural shop - capable of cutting (gas, arc, and shear), rolling, shaping, grinding, and fitting steel and aluminum stock forms.

(iii) Pipe shop - capable of targeting, fitting, bending, testing, and threading typical shipboard pipe (including brazing).

(iv) Welding shop - capable of welding (steel and aluminum) plates, shapes, sheet metal, and piping joints (shop and downriver).

(v) Electrical/electronic shop - capable of removing, repairing, installing, and operational testing of shipboard equipment.

(vi) Rigging shop.

(vii) Spray booth of at least 200 square feet meeting all NFPA and OSHA standards and regulations.

(viii) Staging/storage capacity for incidental materials.

(c) Bremerton - Office and storage/staging facility for incidental materials within 25 miles of Puget Sound Naval Shipyard.

(d) At Contractor facilities generally: Contractor must provide facilities for rapid transfer of electronic files between contractor facilities and NSWCCD-SSES (at the current time, a T-1 line or better, to be upgraded if and as required to maintain state of the art capability and compatibility with NSWCCD-SSES).

(e) Portable workshops (similar to existing NSWCCD-SSES CONEX boxes) may be required to complete specific delivery/task orders. When the contractor is required to provide portable workshops, temporary, or long-term staging facilities for a specified delivery order, this will be reimbursed as a direct expense.

Capabilities/Certifications:

The contractor must possess and maintain the following capabilities and certifications:

1. NAVSEA approved Quality Assurance Program.
2. NAVSEA Agreement for Boat Repair (ABR) Certification for the Norfolk, San Diego and Mayport areas.
3. Defense Contract Management Command (DCMC) approved government property control procedures.

IV. DELIVERABLES/DATA REQUIREMENTS

1. DD Form 250 will be used as the acceptance document and the contractor will be required to submit a DD 250 at the completion of each individual order placed under this contract.
2. The contract shall furnish technical data as specified on the DD Form 1423 attached hereto and as specified in any DD 1423 attached to an individual order.

V. STANDARDS/SPECIFICATIONS

1. The contractor shall comply with applicable shipboard industrial safety and environmental control regulations including local (i.e. ship, base or station) requirements.
2. The contractor shall conform to shipboard regulations with regard to cleanliness, personnel conduct, and ships security and integrity during alteration.
3. The contractor shall provide verification of certification for welders and pipefitters and ensure that certified personnel carry a copy of their certification at all times while performing SHIPALTS/MACHALTS on Government vessels or property.
4. Except as otherwise specifically provided in an order placed under this contract, the quality of all services rendered under this contract shall conform to the highest standards in the relevant profession, trade or field of endeavor. All services shall be rendered by or supervised directly by individuals fully qualified in the relevant profession, trade or field, and holding any licenses required by law.
5. The contractor shall provide and maintain a Quality System that shall, as a minimum, comply with the requirements of NAVSEA Standard Item 009-04, and which shall have been accepted by NAVSEA 04XQ or a SUPSHIP office.

VI. GOVERNMENT FURNISHED MATERIAL/INFORMATION (GFM-GFI)

Government furnished materials (GFM) and government furnished information (GFI), if any, will be specified in individual delivery orders.

VII. PERSONNEL QUALIFICATIONS

1. General Requirements -

(a) The contractor shall be responsible for employing technically qualified personnel to perform the tasks to be ordered hereunder. The contractor shall maintain the personnel, organization and administrative control necessary to ensure that the work delivered meets the contract specification requirements.

(b) The work history of each employee must contain experience directly related to the task and functions he/she intends to perform under this contract. The Government reserves the right, during the term of this contract, to request work histories on any contractor employee for purposes of verifying compliance with this requirement.

(c) If the contracting officer questions the qualifications or competence of any person performing under the contract, the burden of proof to sustain that the person is qualified as prescribed herein shall be upon the contractor.

2. Key Personnel – The following labor categories are designated Key Personnel for this contract: Program Manager; Senior Engineer; Project Engineer; Senior Engineering Technician; Quality Assurance Specialist; HVAC Technician; and Site Foreman.